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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/501,092

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Katsuya Itoh

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11/06/2008

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EXAMINER

TOSCANO, ALICIA

ART UNIT

PAPER NUMBER

1796

MAIL DATE

DELIVERY MODE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/501,092	Applicant(s) ITOH ET AL.	
	Examiner Alicia M. Toscano	Art Unit 1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 September 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Regarding claim 1, the rejection stands as set forth below and previously for the following reasons: (1) When comparing Ex 1 to Comp Ex 1, one can conclude that *for a PET/silica; PBT/phosphorous 40/60 mixture at compression ratio 1.5* one requires a temperature less than 285 in the third extruder. The composition and temperature requirement is met by Majima, see the rejection below (temp is disclosed in Column 10 line 35). (2) When comparing Ex 1 to Ex 3 one can conclude that *for a PET/silica; PBT/phosphorus 40/60 mixture at a temperature of 260* the compression ratio must be below 4.0. The compression ratio is not disclosed by Majima however this result is not commensurate in scope with the claims since the claims (1) allow for any crystalline polyester and (2) do not require silica and phosphorus. To show lack of inherency for claim 1 Applicant is required to show data for the scope of the polyester blends claimed, since Majima anticipates the scope of the claims. If a proper showing of non-inherency were made and the claims were commensurate in scope with the showing of non-inherency, Majima would not anticipate the claims since Majima does not disclose the compression ratio. (3) Ex 9 has the same processing conditions as Ex 1 and Ex 3 (temperature of 260 and compression ratio of 1.5) *except* the PBT is PHT and the mixing ratio is 90/10. Ex 9 gives a half value of 0.23, above that claimed. This demonstrates that the breadth (i.e. any crystalline polyester B and mixing amounts of 10-90 to 90-10 wt%) of Applicant's claims do not always result in the claimed half value. It is unclear to the Examiner how one is enabled to make the claimed invention without

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undue experimentation and the Examiner requests clarification. As such the rejection set forth previously and below stands.

2. Applicant has currently added claims 7 and 8. Claims 7 and 8 are product by process claims. All of the Examples of the specification include both silica and phosphorus. None of the claims require both silica and phosphorus. As such the Examiner cannot properly ascertain whether a different product is produced for the entire scope of the claims. The Examiner recommends (1) data without silica and phosphorus, or, (2) adding silica and phosphorous to the claims. If the claims were amended to require (1) silica and phosphorus and (2) the PET and PBT species in a 40/60 mixing ratio, the examples of the specification would be sufficient to show that a different product is produced when using the extruders, compression ratios, L/D and temperature required by the process. As such the 102(b) anticipation would be overcome.

3. The Examiner makes note of reference US 5153302 which discloses biaxially oriented films of PET wherein, in order to suppress heat generation due to shear, the compression ratio is disclosed to be 1.5-2.3 and the L/D ratio is 20-28 (Column 3 lines 23-26). As such, if and/or when non-inherency was determined and the claims were limited as set forth above, the compression ratio and L/D values would be obvious in view of this reference.

Claim Rejections - 35 USC § 102

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

4. Claims 1-8 are rejected under 35 U.S.C. 102(b) as being anticipated by Majima (WO 01/092417 as evidenced by US 6780482, which is used as an Equivalent English document).

This rejection is as set forth in the action dated 11/28/06, reiterated below.
Rejection over new claims 7 and 8 is added.

Majima discloses polyester films for metal sheet laminating. Said films comprise 80-40 wt% polybutylene terephthalate and 20-60 wt% polyethylene terephthalate (abstract).

The composition requirements have been met by Majima. Further, Majima discloses using the same process of applicants, where the individual components are separately melted in different extruders prior to blending and extruding (Column 8 Lines 61-64 and Column 10 Lines 33-37). Majima prefers this method in order to control the ester exchange reaction (Column 8 Lines 63-64). The use of a temperature range of 250-280 is disclosed in Column 10 line 30. As the processing conditions are met, Examiner finds the half value width of the recrystallization peak to be inherent in Majima, thus meeting all the limitations of Claims 1 and 2.

Claim 3 requires a peak temperature of recrystallization of not less than 180C, which is obtained from heating the film and then cooling at a rate of 25C/min (see applicants specification pg 21 lines 20 – pg 22 line 2). Majima discloses a heat-up

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crystallization peak (T_c) obtained by heating the film and cooling at a rate of 100C/min (Column 16 Lines 17-28). The recrystallization temperatures of Majima and Applicant are not comparable. It is the Examiners position that since Majima has the same polymers, processed in the same manner, that the peak temperature of recrystallization is inherent.

The reduced viscosity is 0.75 or higher (abstract), see Table 2 which discloses numerous examples (ex 2, 3, 4, 6, 8, and 10-12) in which the intrinsic viscosity of the stretched film is higher than 0.80, as required for Claim 4. Said film is used for laminating a metal sheet (title) and form processing (Column 12 Lines 21-27), as required for Claims 5 and 6.

Claims 7 and 8 are product by process claims, the process is not given patentable weight unless Applicant can show a different product is produced.

Response to Arguments

5. Applicant's arguments filed 9/19/08 have been fully considered but they are not persuasive. Applicant argues the half value has not been shown to be inherently met by Majima. Applicant argues the Examples demonstrate that even when separate extruders are used, the half value may be greater than 0.22. Applicant notes Comp Ex 1 and Ex 3 do not meet the half value requirement. Applicant argues the specification describes the conditions necessary to produce a film of the required half value and further argues that Ex 1 and 3 show the requirement of a compression ratio of less than 4.0 and that Ex 1 and Comp Ex 1 show the requirement of a temperature less than

285C. Applicant argues the new claims recite conditions for producing the film with the required half value and Majima does not teach a film having said value. As such Applicant argues the claims are allowable.

6. The Examiner disagrees. See the remarks set forth above. Applicant's proposed showing of inherency is not commensurate in scope with the claims. Majima meets the requirements of the composition, the extruders and the temperature. The new claims are not allowable since they are product by process claims and proper showing of a different product being produced has not been made. As such the rejection stands.

Conclusion

All claims are drawn to the same invention claimed previously and could have been finally rejected on the grounds and art of record in the next Office action if they had been entered earlier. Accordingly, **THIS ACTION IS MADE FINAL** even though it is a first action after a request for continued examination under 37 CFR 1.114. See MPEP § 706.07(b). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no, however, event will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alicia M. Toscano whose telephone number is (571)272-2451. The examiner can normally be reached on M-F 8:00 AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy Gulakowski can be reached on 571-272-1302. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

AMT

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/Randy Gulakowski/

Supervisory Patent Examiner, Art Unit 1796